

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 87-030

UPDATED WATER RECLAMATION REQUIREMENTS FOR:

SONOMA VALLEY COUNTY SANITATION DISTRICT AND MITCHEL M. MULAS,
SONOMA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, hereinafter called the Board, finds that:

1. The Sonoma Valley County Sanitation District (hereinafter the Producer), supplies reclaimed water disinfected to 23 MPN/100 ml from its secondary treatment plant to Mitchell M. Mulas (hereinafter the User) for the irrigation of fodder, fiber, and seed crops; and pasture for use by milking and non-milking animals.
2. This reuse is presently regulated by water reclamation requirements contained in Regional Board Order No. 82-67, adopted on December 15, 1982.
3. The discharge to Schell Slough and Hudeman Slough from November 1 through April 30 is covered by a separate set of requirements adopted by the Regional Board under the National Pollutant Discharge Elimination System.
4. The Board adopted a revised Water Quality Control Plan for San Francisco Bay Basin in December 1986. The water quality goals to be used in regulating water quality factors as set forth in the Basin Plan include maximum feasible reclamation or reuse of municipal, industrial, and agricultural wastewater.
5. Section 13523 of the California Water Code provides that a Regional Board, after consulting with and receiving the recommendations of the State Department of Public Health, and if it determines such action to be necessary to protect public health, safety, or welfare, shall prescribe water reclamation requirements for water which is used or proposed to be used as reclaimed water. The use of reclaimed water for the purposes specified in Finding 1 could affect the public health, safety, or welfare, and requirements for these uses are therefore necessary in accordance with the Water Code.
6. These water reclamation requirements are in conformance with the statewide reclamation criteria established by the State Department of Health Services as prescribed in Title 22, Section 60301 through Section 60355 of the California Administrative Code.
7. This project involves to continued operation of a sewage treatment and disposal facility with no expansion of use beyond that previously existing. Consequently, this project will not have a significant effect on the environment based upon the exemption provided in Title 14, Section 15101 of the California Administrative Code.

8. This Regional Board has notified the Producer, the User and interested agencies and persons of its intent to prescribe water reclamation requirements for the proposed uses.
9. The Board at a public meeting heard and considered all comments pertaining to this reuse.

IT IS HEREBY ORDERED that the Producer and User, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following:

A. Prohibitions

1. The treatment, distribution or reuse of reclaimed wastewater shall not create a nuisance as defined in Section 13050(m) of the California Water Code.
2. Use of reclaimed wastewater under the provisions of this Order shall be limited to spray irrigation of fodder, fiber and seed crops; and pasturing of non-milking and milking animals.
3. No reclaimed water shall be applied to the irrigation sites during the period of November 1 through April 30, when the soil is saturated, or during periods of rainfall.

B. Discharge Specifications

1. Animals shall not be allowed to graze on pasture irrigated with reclaimed water until it is thoroughly dry.
2. Reclaimed water shall not be used as a domestic or animal water supply.
3. Reclaimed water shall not be applied so as to cause saturated conditions within 100 feet of any well, house, milking barn, pond, or flowing stream channels containing surface water.
4. The use of reclaimed water shall not cause the degradation of groundwater suitable for domestic use or cause any change in a quality parameter which would make the groundwater less suitable for irrigation use.
5. The discharge of waste shall not cause seepage to be present outside the holding ponds or irrigation areas.
6. Wastes at the surface of the holding ponds shall meet the following quality limit at all times:

In any grab sample:

Dissolved Oxygen	2.0 mg/l minimum
Dissolved Sulfide	0.1 mg/l maximum

7. The holding ponds shall be protected from erosion and washout, and flooding having a projected frequency of once in 100 years.
8. A minimum of two feet of freeboard shall be maintained in the ponds at all times.
9. The public shall be effectively excluded and notified of the presence of wastewater in the ponds.

C. Reclaimed Water Use Specifications

1. The Producer shall assure that the reclaimed water is adequately disinfected and oxidized, and meets the following quality limits at all times:

In any grab sample:

- | | |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| a. 5-day BOD | 30 mg/l (30 day ave.)
60 mg/l (daily max.) |
| b. Dissolved Oxygen | 1.0 mg/l minimum |
| c. Dissolved Sulfide | 0.1 mg/l maximum |
| d. Coliform Organisms | Median MPN shall not exceed 23 coliform organisms per 100 milliliters of sample or 240 MPN/100 ml for any two consecutive samples at some point in the treatment process. The median value will be determined from the bacteriological results of the last 7 analyses. |
2. The Producer shall discontinue the diversion of reclaimed water to the User during any period in which he has reason to believe the limits in C.1. are not being met.
 3. Areas with public access irrigated with reclaimed wastewater shall be fenced and clearly identified with posted notices to the public. The method and form of notification shall be subject to the review and approval of the Executive Officer.
 4. All equipment, including pumps, piping, valves, etc. with public access which may at any time contain waste shall be adequately and clearly identified with warning signs and the Users shall make all necessary provisions, in addition, to inform the public that the liquid contained is sewage and is unfit for human consumption.
 5. Reclaimed wastewater shall be applied to use areas in a manner which will prevent direct public contact with the wastewater.


6. The User of reclaimed wastewater shall manage its application so as to minimize mosquito breeding. The User shall comply with requirements of the local Mosquito Abatement District.
7. Surface drainage channels for the hillside areas irrigated with reclaimed wastewater shall be dammed to prevent any runoff of reclaimed wastewater from entering flowing stream channels containing surface water. All ponded (dammed) reclaimed wastewater shall be disposed properly in accordance with the restrictions, specifications, and provisions of this Order.
8. If a use restriction should be violated, the irrigation with reclaimed wastewater shall be immediately terminated at the specific location and not resumed until all violations and conditions which would permit the violations to recur have been corrected.
9. Fodder, fiber and seed crops shall not be harvested when wet from spraying with reclaimed wastewater.
10. No reclaimed wastewater used for irrigation shall be allowed to cause saturated conditions to any area outside the disposal areas, either by surface flow or by airborne spray. The disposal areas shall be defined to mean the irrigation areas plus the ditch systems draining the areas.

C. Provisions

1. The Producer and User shall comply with a Self-Monitoring Program as ordered by the Executive Officer.
2. Regional Board Order No. 82-67 is hereby rescinded.
3. 90 days prior to initial commencement of wastewater reclamation on any use areas, the Producer and User shall submit to the Board:
 - a. Maps showing exact areas to be irrigated,
 - b. The proposed use of the reclaimed water on each irrigation area,
 - c. A map showing the locations of domestic and irrigation wells in, or adjacent to, the irrigation areas, and
 - d. A report (after consultation with the State and County Health Departments) that is satisfactory to the Executive Officer on how each well will be adequately protected and monitored.
4. The User shall not withdraw the Producer's effluent for reclamation unless compliance with Provision C.3 has been demonstrated. Use of reclaimed water on a specific field other than areas shown on the map required by Provision C.3 shall not occur unless prior written authorization is received from the Executive Officer.

5. In the event of any change in control or ownership of land or water reclamation facilities presently owned or controlled by the Producer and/or User, the Producer and/or User shall notify the succeeding owner or operator of the existence of this Order by a letter, a copy of which shall be forwarded to this Board.
6. The Producer and User shall file with the Regional Board a report of waste discharge at least 180 days before making any material or proposed change in the character, location, or volume of the reuse.
7. The Producer and User shall permit the Board or its authorized representative in accordance with California Water Code Section 13267(c):
 - a. Entry upon premises in which an effluent source is located or which any required records are kept
 - b. Access to copy any records required to be kept under the terms and conditions of this Order
 - c. Inspection of any monitoring equipment or method required by this Order
 - d. Sampling of any discharge or reclaimed water
8. The Producer and User shall maintain in good working order and operate, as efficiently as possible, any facility or control system installed to achieve compliance with the water reclamation requirements.
9. The Board will review this Order periodically and may revise the requirements when necessary.

I, Roger B. James, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the Regional Water Quality Control Board, San Francisco Bay Region, on April 15, 1987.

A handwritten signature in dark ink, appearing to read "Roger B. James", with a stylized flourish extending to the right.

ROGER B. JAMES
Executive Officer

Attachment:
Self-Monitoring Program

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

FINAL
SELF-MONITORING PROGRAM
FOR

SONOMA VALLEY COUNTY SANITATION DISTRICT
AND
MITCHEL MULAS

SONOMA, SONOMA COUNTY

ORDER NO. 87-030

CONSISTS OF

PART A

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

PART A

1. GENERAL

Reporting responsibilities of waste dischargers are specified in this Regional Board's Resolution No. 73-16 and in Sections 13225(a), 13268, 13383, and 13387(b) of the California Water Code.

The principal purposes of a monitoring program by a waste discharger, also referred as a self-monitoring program, are:

- a. To document compliance with waste discharge requirements and prohibitions established by the Regional Board.
- b. To facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge.

2. SAMPLING AND ANALYTICAL METHODS

Sample collection, storage, and analyses shall be performed according to the latest edition of

"Standard Methods for the Examination of Water and Wastewater"

prepared and published jointly by the American Public Health Association, American Water Works Association, and Water Pollution Control Federation; or other methods approved and specified by the Executive Officer of this Regional Board.

Water and waste analyses shall be performed by a laboratory approved for these analyses by the State Department of Health or a laboratory approved by the Executive Officer. The Director of the laboratory whose name appears on the certification shall supervise all analytical work in his laboratory and shall sign all reports of such work to the Regional Board.

All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements.

3. DEFINITION OF TERMS

1. A grab sample is defined as an individual sample collected in less than 15 minutes.

2. Standard Observations

a. Holding Ponds

This applies both to liquid and solid wastes confined or unconfined.

- (1) Determine height of the freeboard at the lowest point of dikes confining liquid wastes.
- (2) Evidence of leaching liquid from area of confinement and estimated size of affected area (Show affected area on a sketch).
- (3) Odor: presence or absence, characterization, source, and distance of travel.
- (4) Estimated number of waterfowl and other water-associated birds in the reservoir area and vicinity.

b. Spray Irrigation Field

- (1) Evidence of leaching liquid from area of confinement and estimated size of affected area (Show affected area on a sketch).
- (2) Odor: presence or absence, characterization, source, and distance of travel.
- (3) Evidence of effluent runoff from the spray disposal area (Show affected area on a sketch).

4. DESCRIPTION OF SAMPLING STATIONS AND SCHEDULE OF SAMPLING, ANALYSIS AND OBSERVATIONS

1. Description of Sampling Stations

a. Pond System Monitoring

Station	Description
O-1	At any point in the outfall from the holding ponds to the spray areas between the point of discharge and the point at which all waste tributary to that outfall is present.
P-1 thru P-'n'	At any point on the surface of the holding ponds, representative of the wastewater.

b. Land Observations

Station	Description
R-1 thru R-'n'	Located at points spaced equidistantly along the perimeter levees of the evaporation ponds.
S-1 thru S-'n'	Located at points spaced equidistantly along the perimeter of the spray disposal field.

2. This Self-Monitoring Program is applicable when wastewater is reclaimed for irrigation.
3. The User is required to perform observations, sampling and analysis according to the schedule given in Table I.

5. REPORTS TO BE FILED WITH THE BOARD

1. Violation of Requirements

In the event the User or Producer is unable to comply with the conditions of the requirements and prohibitions this Order due to:

- (a) maintenance work, power failure, or breakdown of waste treatment equipment, or
- (b) accidents caused by human error or negligence, or
- (c) other causes such as acts of nature,

the User or Producer shall notify the Regional Board office by telephone as soon as he or his agents have knowledge of the incident and confirm this notification in writing within two weeks of the telephone notification. The written report shall include pertinent information explaining reasons for the non-compliance and shall indicate what steps were taken to prevent the problems from recurring.

2. Self-Monitoring Reports

Written reports by the User shall be filed regularly for each calendar month by the fifteenth day of the following month. The reports will be comprised of the following:

(a) Letter of Transmittal

A letter transmitting self-monitoring reports should accompany each report. Such a letter shall include:

- i. A discussion of requirement violations found during the past month.

- ii. Actions taken or planned for correcting the violations such as operation modifications, and/or facilities expansion.
- iii. If the User has previously submitted a time schedule for correcting requirement violations, a reference to the correspondence transmitting such schedule will be satisfactory.
- iv. A statement by the official, under penalty of perjury, that to the best of the signer's knowledge the report is true and correct.

(b) Data Results

All results observed or analyzed including dates and times of sampling and/or observations.

(c) Map

A map shall accompany the report showing sampling and observation locations.

I, Roger B. James, Executive Officer, do hereby certify that the foregoing Self-monitoring Program:

- 1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with the Water Reclamation Requirements established in Regional Board Order No. 87-030.
- 2. Is effective on the date shown below.
- 3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the Producers or Users, and revisions will be ordered by the Executive Officer.


for
ROGER B. JAMES
Executive Officer

Effective Date: 4/21/87

Attachments:

- a. Table I

ATTACHMENT A

TABLE I

SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

SAMPLING SATATIONS	O-1	P-1 thru P-'n'	R-1 thru R-'n'	S-1 thru S-'n'
Type of Samples	G	G	G	O
Flow Rate (gpd)	D			
pH (unit)		M		
Dissolved Oxygen (mg/l)		M		
Sulfides, Total & Dissolved (mg/l) *		M		
Settleable matter (mg/l-hr)		M		
All Applicable Standard Observations			W	W

LEGEND FOR TABLE

G = Grab Sample D = Daily
 O = Observation W = Weekly
 M = Monthly

Notes:

- * Analyze for this item only when Dissolved Oxygen is below 2.0 mg/l.